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1762

**PATENT**  
Attorney Docket No. 400113  
Client Reference No. FP-5946A

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:

Hiroaki SATOH

Art Unit: 1762

Application No. 09/271,447

Examiner: Michael B. Cleveland

Filed: March 18, 1999

For: PROCESS FOR FORMING A PATTERN  
OF FLUORESCENT SUBSTRATE AND  
PLASMA DISPLAY PANEL

**TRANSMITTAL OF  
APPELLANT'S APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR 1.192, appellant hereby submits Appellant's Brief on Appeal in triplicate.

The items checked below are appropriate:

**1. Status of Appellant**

This application is on behalf of ☒ other than a small entity or ☐ a small entity.

**2. Fee for Filing Brief on Appeal**

Pursuant to 37 CFR 1.17(c), the fee for filing the Brief on Appeal is for: ☒ other than a small entity or ☐ a small entity.

**Brief Fee Due** \$330.00

**3. Oral Hearing**


☐ Appellants request an oral hearing in accordance with 37 CFR 1.194.

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**CERTIFICATE OF MAILING**

I hereby certify that this document (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below, in an envelope as "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. § 1.10, Mailing Label Number EV335718815US, addressed to: Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: September 10, 2004

  
XAVIER PILLAI

In re Appln. of Hiroaki SATOH  
Application No. 09/271,447

**4. Extension of Time**

- ☐ Appellants petition for a one-month extension of time under 37 CFR 1.136, the fee for which is \$110.00.
- ☒ Appellants believe that no extension of time is required. However, this conditional petition is being made to provide for the possibility that appellants have inadvertently overlooked the need for a petition and fee for extension of time.

**Extension fee due with this request: \$**

**5. Total Fee Due**

The total fee due is:

|                          |          |
|--------------------------|----------|
| Brief on Appeal Fee      | \$330.00 |
| Request for Oral Hearing | \$ 0.00  |
| Extension Fee (if any)   | \$ 0.00  |

**Total Fee Due: \$330.00**

**6. Fee Payment**

- ☐ Attached is a check in the sum of \$
- ☒ Charge Account No. 12-1216 the sum of \$330.00. A duplicate of this transmittal is attached.

**7. Fee Deficiency**

- ☒ If any additional fee is required in connection with this communication, charge Account No. 12-1216. A duplicate copy of this transmittal is attached.



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**APPELLANT'S APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In support of the appeal from the final rejection dated April 23, 2004, Brief.

(1) *Real Party In Interest*

The patent application that is the subject of this appeal is assigned to The Nippon Synthetic Chemical Industry Co., Ltd.

(2) *Related Appeals and Interferences*

There are no appeals or interferences that are related to this appeal.

(3) *Status of Claims*

The application was originally filed with claims 1-9. By way of an amendment filed on October 10, 2001, claim 9 was canceled; and new claims 10-15 were added.

In the response dated February 26, 2002, claim 1 was amended; and new claims 16-19 were added. In the response dated July 3, 2002, claims 7, 15, and 16 were canceled, and claims 1, 8, and 19 were amended. In the response dated November 13, 2002, claims 1, 8, and 19 were again amended; and new claims 20-22 were added. In the response dated March 19, 2003, claims 1-6, 8, 10-14, and 17-19 were canceled, and claims 20-22 were amended.

In the response dated August 28, 2003, claims 20-22 were amended again. The same claims were resubmitted on September 29, 2003 as part of a response to the Notice of Non-

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Compliant Amendment dated September 17, 2003. In the response filed February 9, 2004, claims 20-22 were again amended. Claims 20-22, thus amended, are pending, stand rejected, are on appeal, and are reproduced in the Appendix.

(4) *Status of Amendments*

The claim amendment filed on February 9, 2004 has been entered. The final Office Action of April 23, 2004 is outstanding. No amendments were filed subsequent to the above final Office Action.

(5) *Summary of Invention*

The invention as defined by claims 20-22 is directed to a process for forming a pattern of fluorescent substance into a cell of a fluorescent substance display substrate. The process involves providing in the cell two separate layers, a resin composition (A) layer and a photosensitive resin composition (B) layer, exposing the layers to light, developing the exposed layers, and baking the developed layers. The resin composition (A) layer consists essentially of an acrylic polymer (a) having a weight average molecular weight of 10,000 to 300,000 and an acid number of 80-250 mg KOH/g, a fluorescent substance (b), a compound containing at least one ethylenically unsaturated group (c) having a viscosity of 5-15,000 mPa. sec. at 20° C, and 0.1 to 15 parts by weight of a polymerization inhibitor (d) based on 100 parts by weight of the acrylic polymer (a). The resin composition (A) layer is disposed between the inside of the cell and the photosensitive resin composition (B) layer. The photosensitive resin composition (B) comprises a photoinitiator. The resin composition (A) layer includes a photopolymerization inhibitor. As a result, the resin composition (A) layer is not photopolymerized. The presently claimed invention is advantageously free of pattern defects, and the fluorescent pattern forms uniformly and effectively.

(6) *Issues*

1. Are claims 20-22 unpatentable under 35 U.S.C. § 103(a), over U.S. Patent 6,329,111 (Nojiri) in view of U.S. Patent 5,371,148 (Taylor), U.S. Patent 5,858,616 (Tanaka et al.), and U.S. Patent 4,239,849 (Lipson et al.)?
2. Are claims 20-22 unpatentable under 35 U.S.C. § 103(a), over Tanaka et al. in view of Taylor, U.S. Patent 5,922,395 (Koike et al.), and Lipson et al.?

(7) *Grouping of Claims*

For the purposes of this appeal, there are two groups of claims to be given separate consideration. These groups of claims do not stand or fall together.

Group I: Independent claims 20 and 22.

Group II: Independent claim 21.

(8) *Argument*

Obviousness or lack thereof of a claimed invention is determined under 35 U.S.C. 103 based on an analysis mandated by the United States Supreme Court in *Graham v. John Deere Co.*, 388 U.S. 1, 148 USPQ 459 (1966). The analysis requires inquiry into: (1) scope and content of the prior art, (2) the differences between the prior art and the claimed subject matter, and (3) the level of ordinary skill in the art at the time the invention was created. *See, Apple Computer, Inc. v. Articulate Systems, Inc.*, 234 F.3d 14, 57 USPQ2d 1057 (Fed. Cir. 2000); *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000). In addition, objective evidence of nonobviousness or objective indicia of nonobviousness must also be considered. *See, e.g., Weatherchem Corp. v. J.L. Clark, Inc.*, 163 F.3d 1326, 49 USPQ2d 1001 (Fed. Cir. 1998).

To establish a *prima facie* case for obviousness, the Examiner must satisfy three requirements: (1) the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled person to modify a reference or to combine the references. *See, e.g., Karsten Mfg. Corp. v. Cleveland Gulf Co.*, 242 F. 3d 1376, 185, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001); if the cited references teach away from the proposed invention, there is no motivation to combine the references. *See, e.g., W.L. Gore and Assocs., Inc. v. Garlock, Inc.* 721 F.2d 1540, 1552, 220 USPQ 303, 312 (Fed. Cir. 1983); the teachings or suggestions, as well as the second requirement, expectation of success, must come from the prior art, not applicant's disclosure; *see, In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); (2) the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of an ordinary skilled artisan at the time the invention was made; hindsight analysis is not allowed; *see, Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209, 18 USPQ 2d 1016, 1023 (Fed. Cir. 1991); and (3) the prior art reference or the combination of references must teach or suggest all limitations of the claims; *see, In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Claims 20-22 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Nojiri in view of Taylor, Tanaka et al., and Lipson et al. The Examiner states that Nojiri teaches a process for forming a pattern of fluorescent substance display substrate comprising

providing in the cell two separate layers: (i) a resin composition layer (A) and (ii) a photosensitive composition layer (B), exposing the layers to light, developing the layers and baking the layers. The Examiner further states that the resin composition layer (A) comprises an acrylic polymer, an ethylenically unsaturated compound, and a fluorescent substance. The Examiner further states that a photosensitive composition may also contain a polymerization inhibitor to aid in the photopolymerization. The Examiner concedes that Nojiri fails to teach a layer consisting essentially of (a) an acrylic polymer, (b) a phosphor, (c) an ethylenically unsaturated group, and (d) a polymerization inhibitor. However, the Examiner contends that Taylor teaches that acrylic polymers may be photopolymerized either with the addition of ethylenically unsaturated compound or without the addition of photoinitiators. The Examiner further contends that it would have been obvious to one of ordinary skill in the art at the time of the invention to have eliminated the photoinitiator from the photopolymerizable composition of Nojiri in order to have saved material costs or as a matter of convenience with a reasonable expectation of success for the stated reason that Taylor teaches that the components are not required for photopolymerization. The Examiner is in error for a number of reasons.

Reason No. 1 for Examiner's Error

The resin composition (A) layer of the presently claimed invention is not photopolymerized. Appellant has included a photopolymerization inhibitor in an amount sufficient to prevent photopolymerization. The ethylenically unsaturated compound is used as a plasticizer to reduce the glass transition temperature of the acrylic polymer. The ethylenically unsaturated compound remains ethylenically unsaturated during the process of irradiation with light. This has been shown clearly by the appellant in the Rule 132 Declaration by Hiroaki Satoh, signed on February 4, 2004. See Results and Discussion section, wherein the amount of tetraethylene glycol dimethacrylate (which is an ethylenically unsaturated compound) per gram of the resist before exposure was 0.38125 g, and the weight of the same compound after exposure was 0.3795 g. Thus, the ethylenically unsaturated compound remains unpolymersized (within the limits of the experimental error).

The cited references Nojiri and Taylor both disclose that the resin composition layer (A) is photopolymerized, i.e., the ethylenically unsaturated compound undergoes polymerization when exposed to light so that the amount of the ethylenically unsaturated

compound would be greatly reduced or eliminated. In view of the teaching in the cited references, which require that the resin layer (A) should be polymerized, where is the suggestion or motivation to those of ordinary skill in the art, to arrive at something which is totally opposite to the express teachings of the references?

The cited references Nojiri and Taylor clearly teach those of ordinary skill in the art away from the claimed invention. In view of the foregoing, the Examiner failed to make a *prima facie* case for obviousness, and the obviousness rejection must, therefore, be reversed. See *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 1552 (error to find obviousness where references “diverge from and teach away from the invention at hand;” prior art teaching that conventional polypropylene should have reduced crystallinity before stretching and should undergo slow stretching led away from claimed process of producing porous article by expanding highly crystalline PTFE by rapid stretching); *accord.*; *In re Fine*, 5 USPQ 2d 1596 (Fed. Cir. 1988). Proceeding contrary to the accepted wisdom in the art represents “strong evidence of unobviousness.” *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986).

#### Reason No. 2 for Examiner’s Error

The Examiner has discounted Appellant’s argument that the resin composition (A) layer is not photopolymerized. The Examiner acknowledges that Appellant has used the term “consisting essentially of” to describe the components of resin composition (A) layer but contends that the above term refers only to the composition of layer (A) that is formed inside the cell, and does not refer to the steps of this process. The Examiner apparently focuses on the term “comprising” found in line 2 of claims 20 and 22, and argues that the use of the term “comprising” keeps the claim open-ended with respect to layer (A) despite the express use of the term “consisting essentially of” to describe the components of layer (A).

Although the term “comprising” is open-ended, it is established law that the term “comprising” found in the claim “does not free the claim from its own limitations”. *Kustom Signals, Inc. v. Applied Concepts, Inc.*, 264 F.3d 1326, 60 USPQ 2d 1135 (Fed. Cir. 2001). If a patentee has relinquished from the language of claims some subject matter during the prosecution of the patent, the use of the term “comprising” cannot restore the relinquished subject matter. *Spectrum International Inc. v. Sterilite Corp.*, 49 USPQ 2d 1065 (Fed. Cir. 1998).

Appellant has clearly admitted, and the prosecution history is consistent with the proposition, that the resin composition layer is not photopolymerized. In this regard, claims explicitly recite the use of a photopolymerization inhibitor. Thus, although “comprising” is used as a transitional phrase for the process of claims 20 and 22, the scope of the claim is such that it does not include compositions wherein the layer (A) is photo-polymerized. Accordingly, the Examiner is in error to insist that the claim is still open ended, and should be reversed.

Further, claim 21 does not recite “comprising” as a transitional phrase for the process steps. The claim recites that the photosensitive resin composition (B) comprises a photoinitiator. But this is irrelevant insofar as layer (A) is concerned. It is clear to those skilled in the art that the claim as whole excludes photopolymerization of layer (A) by virtue of the express use of the photopolymerization inhibitor and of the term “consisting essentially thereof”. For this reason, claim 21 is separately patentable relative to claims 20 and 22.

In view of the foregoing, the Examiner is in error for discounting the argument that layer (A) is not photopolymerized in claims 20-22 and should be reversed.

#### Reason No. 3 for Examiner’s Error

The Examiner contends that Lipson et al. teaches the use of polymerization inhibitor in amounts of up to 5 parts by weight per 40-90 parts by weight of a binding agent (acrylic); i.e., 0-12.5 parts by weight per 100 parts by weight of the binding agent. The Examiner combines Lipson et al. with Nojiri and Taylor to reject the claims. The combination of Lipson et al. with Nojiri and Taylor is inappropriate.

Lipson et al. also teaches a photopolymerizable composition. The amount of the polymerization inhibitor disclosed in Lipson is the amount used in combination with a photoinitiator. That is, Lipson et al. teaches that up to 5 parts by weight of photopolymerization inhibitor may be used in combination with 1 to 10 parts by weight of the photoinitiator (col. 2, lines 14-17). Lipson et al. does not teach a system where the photoinitiator should be left out. Such a system would be contradictory to his invention. Lipson et al. requires photopolymerization. Without the initiator and in the presence of the inhibitor, no photopolymerization occurs (as shown by the Declaration signed on February 4, 2004). Nojiri also requires photopolymerization. Taylor also requires photopolymerization. How can one of ordinary skill in the art combine three references, all requiring



photopolymerization, to arrive at an invention where photopolymerization should be avoided?

Tanaka et al. also uses a photosensitive resin as layer (A). Thus, even if Tanaka et al. is combined, the combination of the four cited references does not suggest the presently claimed invention, which requires, contrary to the teachings in the art, that layer (A) is not photopolymerized. Accordingly, the combination of Nojiri, Taylor, and Lipson et al., with or without Tanaka et al., is erroneous, and the Examiner should be reversed.

Claims 20-22 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatenable over Tanaka et al. in view of Taylor, Koike et al., and Lipson et al.

The Examiner states that Tanaka et al. teaches depositing a layer “that is both resin (A) composition layer and a photosensitive resin (B) composition layer”. The Examiner states that resin composition (A) contains an acrylic resin, a phosphor, and an ethylenically unsaturated compound, and that the composition (A) may contain a polymerization inhibitor. The Examiner concedes that resin composition layer also includes an ethylenically unsaturated monomer and a photoinitiator to aid in the photopolymerization. The Examiner further concedes that Tanaka et al. fails to disclose two separate layers. However, the Examiner points to Taylor and states that Taylor teaches acrylic polymers may be photopolymerized either with the addition of ethylenically unsaturated compounds and without the addition of photoinitiators. The Examiner contends that it would have been obvious to one of ordinary skill in the art at the time of the invention, to have eliminated the photoinitiator from the photopolymerizable composition of Tanaka et al. for the stated reason of saving costs or as a matter of convenience. The Examiner contends that there is reasonable expectation of success because, according to the Examiner, Taylor teaches that the ethylenically unsaturated compounds are not required for the photopolymerization of acrylic monomers. The Examiner is in error.

#### Reason No. 4 for Examiner’s Error

The Examiner failed to make a *prima facie* case for obviousness when he rejected the claims over Tanaka et al., Taylor, Koike et al., and Lipson et al. The Examiner’s statement that Tanaka et al. teaches depositing a layer “that is both a resin (A) composition layer and “a photosensitive resin (B) composition layer” is misleading and erroneous. Tanaka et al.

teaches depositing only one layer - not two layers. Tanaka et al. provides one photosensitive resin composition which comprises:

- (A) a compound having a carboxyl group;
- (B) a resin having a carboxyl group;
- (C) a photopolymerizable unsaturated compound having an ethylenically unsaturated group;
- (D) a photopolymerization initiator which produces free radical by irradiation of active light; and
- (E) a phosphor.

The Examiner in his mind separates this one composition into two layers as resin (A) composition layer and photosensitive resin (B) composition layer in order to fit the invention at hand. This is a clear case of hindsight reconstruction which is impermissible. The Examiner is using the presently claimed invention as a roadmap to strenuously identify two layers in Tanaka et al. with no teaching whatsoever in the reference for such two layers.

Tanaka et al. shows only one layer and that layer is photopolymerized. There is absolutely no suggestion to prepare two layers - one of which is not photopolymerized.

Taylor also discloses one layer and that the resin composition layer is photopolymerized. In view of the teachings of Tanaka et al. (which requires photopolymerization) and of Taylor, which also requires photopolymerization, where is the suggestion or motivation, to those of ordinary skill in the art, to arrive at something which is totally opposite to that of the express teachings of the references? The cited references clearly teach those of ordinary skill in the art away from the claimed invention. *See, e.g., W.L. Gore & Assoc.*, 721 F.2d; *In re Fine* 5, USPQ 2d 1596, *In re Hedges*, 783 F.2d 1038. In view of the foregoing, the Examiner failed to make a *prima facie* case for obviousness, and should be reversed.

As discussed, claims 20 and 22 recite “comprising” as a transitional phrase but the composition of layer (A) is not open-ended in view of the term “consisting essentially of”. Claim 21 does not recite the “comprising” transitional phrase for the process steps. Accordingly, claim 21 is separately patentable.

Reason No. 5 for Examiner's Error

The Examiner states that Koike et al.'s second embodiment shows a pigment composition layer (7) and a photoresist layer applied thereon. The Examiner argues that it would have been obvious to one of ordinary skill in the art to apply a photoresist layer on top of the phosphor layer of Tanaka et al. The Examiner is clearly in error. As discussed, Tanaka et al. does not disclose a phosphor layer per se. Tanaka et al. discloses a single layer prepared from a composition containing compound (A), resin (B), photopolymerizable compound (c), photoinitiator (D), and a phosphor. Tanaka et al.'s layer is photopolymerized. The Examiner's combination of placing a photoresist layer on top of Tanaka et al.'s layer would be meaningless in the context of photoresist technology. Why would anyone of ordinary skill in the art put a photoresist layer on another photoresist layer? Combination of Tanaka et al. and Taylor with Koike et al. is of no help. The combination fails to suggest the presently claimed invention. Lipson et al. fails to rescue the Examiner. As discussed, Lipson et al. discloses use of the said amount of inhibitor only in combination with an initiator. Accordingly, the Examiner should be reversed.

Reason No. 6 for Examiner's Error

The Examiner failed to remove the obviousness rejections despite the showing of unexpected and superior properties of the presently claimed invention.

The presently claimed invention actively prevents photopolymerization of the resin composition (A) layer by including a photopolymerization inhibitor in the resin composition (A) layer. Thus, even if migration of the initiator from the photosensitive resin composition (B) layer occurs, the inhibitor prevents any polymerization that the initiator might induce.

As shown in the Declaration signed on November 1, 2002, the cell substrate of the presently claimed invention (Experiment 1) had no defect pattern. The fluorescent substance was formed effectively and uniformly from the upper to the bottom part of the wall. In contrast, the comparative example (Experiment 2) conducted with a photosensitive resin, the pattern had defects, and the fluorescent substance was not formed effectively and uniformly, and peeling off the wall.

The Examiner's comment that the experimental data of the Declaration signed on November 1, 2002 do not demonstrate the superiority of the present invention is erroneous. The Examiner apparently wants to see the use of a photoinhibitor. However, as the result of

the use of a photoinhibitors would be observable only on a long-term basis, if the migration of the initiator from layer (B) into resin layer (A) occurs. To show this, appellant carried out Experiment 2 by including a photosensitive composition A' (which contained a photoinitiator but not a photoinhibitor). Thus, the advantage of the present invention is not realizable if the initiator is allowed to act in the resin layer (A) (or, in other words, if a photopolymerization inhibitor is not present). Thus, appellant has shown (though indirectly) that the presently claimed invention has a superior property.

(9) *Conclusion*

The appealed claims are not obvious over (1) Nojiri in view of Taylor, Tanaka et al., and Lipson et al. and (2) Tanaka et al. in view of Taylor, Koike et al., and Lipson et al. Accordingly, the rejection of claims 20-22 is improper and should be reversed.

Respectfully submitted,



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Date: September 10, 2004

**APPENDIX**  
**CLAIMS UNDER APPEAL**

20. A process for forming a pattern of fluorescent substance into the cell of a fluorescent substance display substrate comprising providing inside the cell two separate layers which are (i) a resin composition (A) layer and (ii) a photosensitive resin composition (B) layer, exposing the layers to light, developing the exposed layers, and baking the developed layers; wherein the resin composition (A) layer consists essentially of an acrylic polymer (a) having a weight average molecular weight of 10000 to 300000 and an acid number of 80 to 250 mgKOH/g, a fluorescent substance (b), a compound containing at least one ethylenically unsaturated group (c) having a viscosity of 5-15000 mPa.sec at 20 °C, and 0.1 to 15 parts by weight of a polymerization inhibitor (d) based on 100 parts by weight of the acrylic polymer (a), the resin composition (A) layer is disposed between the inside of the cell and the photosensitive resin composition (B) layer, and the photosensitive resin composition (B) comprises a photoinitiator.

21. A process for forming a pattern of fluorescent substance into the cell of a fluorescent substance display substrate, wherein a resin composition (A) layer, consisting essentially of an acrylic polymer (a) having a weight average molecular weight of 10000 to 300000 and an acid number of 80 to 250 mgKOH/g, a fluorescent substance (b), a compound containing at least one ethylenically unsaturated group (c) having a viscosity of 5-15000 mPa.sec at 20 °C, and 0.1 to 15 parts by weight of a polymerization inhibitor (d) based on 100 parts by weight of the acrylic polymer (a), and a photosensitive resin composition (B) layer are formed inside the cell, and then they are exposed, developed and baked, wherein the

photosensitive resin composition (B) layer is formed in the cell after the resin composition (A) layer is formed, and the photosensitive resin composition (B) comprises a photoinitiator.

22. A process for forming a pattern of fluorescent substance into the cell of a fluorescent substance display substrate comprising providing inside the cell two separate layers which are (i) a resin composition (A) layer and (ii) a photosensitive resin composition (B) layer, wherein the resin composition (A) layer, consisting essentially of an acrylic polymer (a) having a weight average molecular weight of 10000 to 300000 and an acid number of 80 to 250 mgKOH/g, a fluorescent substance (b), a compound containing at least one ethylenically unsaturated group (c) having a viscosity of 5-15000 mPa.sec at 20 °C, and 0.1 to 15 parts by weight of a polymerization inhibitor (d) based on 100 parts by weight of an acrylic polymer (a), the photosensitive resin composition (B) comprises a photoinitiator and the photosensitive resin composition (B) layer are formed inside the cell, and then they are exposed, developed and baked, wherein the photosensitive resin composition (B) layer is formed in the cell after the resin composition (A) layer is formed.